

S/N 10/038,766
Our Ref. No. 659-919
Client Ref. No. 16936

IN THE CLAIMS:

Please amend claims 3 and 24 and add new claims 29-33 so that the claims read as follows:

Claim 1 (Cancelled).

2. (Previously Presented) The transfer assembly of claim 3, wherein said recessed portion is located generally centrally in said outer surface.

3. (Currently Amended) A transfer assembly for transporting and applying a discrete part to a moving web, the discrete part having varying thickness, the transfer assembly comprising:

a carrier body having a discrete part engaging outer surface, the outer surface including a generally convex top portion and a generally convex recessed portion spaced inwardly from said top portion, wherein said recessed portion has a fixed, non-changeable ~~generally~~ hour-glass shape; said top portion adapted and configured to engage a first portion of a discrete part having a first thickness, said recessed portion adapted and configured to engage at least one portion of the discrete part having at least one thickness greater than said first thickness, and further comprising at least one aperture in said outer surface and extending through said carrier body for communication with a vacuum source.

Claim 4 (Cancelled).

Claim 5 (Cancelled).

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6. (Previously Presented) The transfer assembly of claim 3 further comprising a carrier base adapted to support said carrier body.

7. (Previously Presented) The transfer assembly of claim 3 wherein said outer surface has a surface roughness of at least 3 micrometers.

8. (Previously Presented) The transfer assembly of claim 3 wherein said outer surface includes a plasma coating thereon.

Claims 9-16 (Cancelled).

17. (Previously Presented) An apparatus for applying discrete parts traveling at a first speed and having a varying thickness onto a substrate web traveling at a second speed, said apparatus comprising:

- a) a web conveyor adapted to support and advance said substrate web;
- b) at least one transfer assembly configured to rotate about a first axis, said transfer assembly including an outer surface which is configured to transport said discrete parts and apply said discrete parts to said substrate web; said outer surface including at least one generally convex recessed portion having a generally convex bottom surface for engaging at least one portion of the discrete parts that is relatively thicker than other portions of the discrete parts;
- c) a drive member which is configured to rotate about a second axis which is offset from said first axis of said transfer assembly;
- d) at least one coupler arm which is pivotally connected to said drive member about a pivot point, said coupler arm including a cam end which is configured to follow a curvilinear path and a crank end which is slidably connected to said transfer assembly; and

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e) a drive mechanism adapted to rotate said drive member about said second axis wherein, as said drive member is rotated, said cam end of said coupler arm is guided along said curvilinear path and said crank end of said coupler arm slidably engages said transfer assembly thereby pivoting said coupler arm about said pivot point to vary an effective drive radius of said transfer assembly and rotate said transfer assembly at a variable speed.

18. (Previously Presented) The apparatus of claim 17 wherein said transfer assembly is configured to maintain a substantially constant first surface speed as the discrete parts are received and a substantially constant second surface speed as the discrete parts are applied to said substrate web.

19. (Previously Presented) The apparatus of claim 17 wherein said first surface speed of said transfer assembly is substantially equal to said first speed of said discrete parts and said second surface speed of said transfer assembly is substantially equal to said second speed of said substrate web.

20. (Previously Presented) The apparatus of claim 17, further comprising a turning mechanism adapted to rotate said at least one transfer assembly before the discrete parts are applied to said substrate web.

21. (Previously Presented) A transfer assembly for transporting and applying a discrete part to a moving web, the discrete part having varying thickness, the transfer assembly comprising:

a carrier body having a discrete part engaging outer surface, the outer surface including a generally convex top portion and a generally convex recessed portion spaced inwardly from said top portion; said top portion adapted and configured to

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engage a first portion of a discrete part having a first thickness, said recessed portion having a bottom surface adapted and configured to engage at least one portion of the discrete part having at least one thickness greater than said first thickness; said bottom surface of said recessed portion having a first predetermined shape relative to said top portion and said top portion having a second predetermined shape relative to said recessed portion when said bottom surface of said recessed portion and said top portion are viewed along an axis substantially normal to said bottom surface of said recessed portion, and further comprising at least one aperture in said top portion of said outer surface and extending through said carrier body for communication with a vacuum source, wherein said carrier body is rotatable about said axis substantially normal to said bottom surface of said recessed portion, and wherein said first predetermined shape of said bottom surface of said recessed portion and said second predetermined shape of said top portion remain fixed as carrier body is rotated about said axis.

Claims 22 and 23 (Cancelled).

24. (Currently Amended) A transfer assembly for transporting and applying a discrete part to a moving web, the discrete part having varying thickness, the transfer assembly comprising:

a carrier body having a discrete part engaging outer surface, the outer surface including a generally convex top portion and a generally convex recessed portion spaced inwardly from said top portion, wherein said recessed portion has a fixed, non-changeable hour-glass shape; said top portion adapted and configured to engage a first portion of a discrete part having a first thickness, said recessed portion adapted and configured to engage at least one portion of the discrete part having at least one thickness greater than said first thickness, and further comprising at least one aperture

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in said outer surface and extending through said carrier body for communication with a vacuum source. ~~The transfer assembly of claim 3~~ wherein said at least one aperture is formed in said top portion of said outer surface and extends through said carrier body for communication with said vacuum source.

25. (Previously Presented) The transfer assembly of claim 3 wherein said at least one aperture is formed in said recessed portion of said outer surface and extends through said carrier body for communication with said vacuum source.

26. (Previously Presented) The transfer assembly of claim 3 wherein said top portion and said recessed portions are integrally formed as a single unitary component.

27. (Previously Presented) The transfer assembly of claim 21 further comprising at least one aperture in said recessed portion of said outer surface and extending through said carrier body for communication with said vacuum source.

28. (Previously Presented) The transfer assembly of claim 21 wherein said top portion and said recessed portions are integrally formed as a single unitary component.

29. (New) The transfer assembly of claim 21, wherein said recessed portion is located generally centrally in said outer surface.

30. (New) The transfer assembly of claim 21 further comprising a carrier base adapted to support said carrier body.

31. (New) The transfer assembly of claim 21 wherein said outer surface has a surface roughness of at least 3 micrometers.

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32. (New) The transfer assembly of claim 21 wherein said outer surface includes a plasma coating thereon.

33. (New) The transfer assembly of claim 3 wherein said carrier body is rotatable about an axis substantially normal to a bottom surface of said recessed portion.